SERVICE MANUAL

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CAUTION: THIS SERVICE MANUAL IS ONLY FOR PROFESSIONAL SERVICE PERSONNEL'S REFERENCE. BEFORE SERVICING THIS CHASSIS, PLEASE READ THE FOLLOWING NOTICE ITEMS.

SAFETY INSTRUCTION

Before servicing and aligning this equipment, please read the following **"X-RAY RADIATION PRECAUTION"** ,**"SAFETY PRECAUTION"** and **"PRODUCT SAFETY NOTICE"**.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The normal value of the high voltage of this receiver is 26.5kV(20") at zero beam current (minimum brightness) under 220V AC power source. the high voltage must not, under any circumstances, exceed 26.5kV.
2. Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended the reading of the high voltage be recorded as a part of service record. It is important to use an accurate and reliable high voltage meter.
3. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
4. The primary source of X-RAY RADIATION in this TV receiver is the picture tube. For continuous X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
5. Some parts in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continuous safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING:

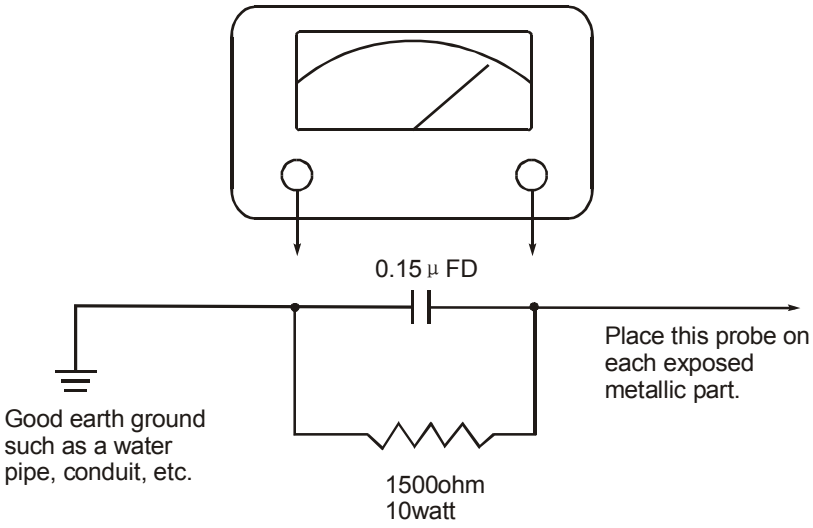
Service should not be attempted by anyone unfamiliar with the necessary precaution on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1) Since the power supply circuit of this receiver is directly connected to the AC power line, an isolation transformer should be used during any dynamic service to avoid possible shock hazard.
2) Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3) When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as: non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4) When replacing parts or circuit boards, disconnect the power cord.
5) When replacing a high wattage resistor (oxiode metal film resistor) on the circuit board, keep the resistor 10mm (1/2in) away from circuit board.
6) Connection wires must be kept away from components with high voltage or high temperature.
7) If any fuse in this TV receiver is blown, replace it with the FUSE specified in the chassis parts list.

8) Before returning the set to your customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 220V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15μF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0. 15μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to o.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

AC VOLTMETER



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the X-RAY RADIATION protection afforded by them cannot necessarily be obtained by using replacement components rated for higher wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplement electrical components having such features are shaded on the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same characteristics as specified in the parts list may create shock, fire, X-RAY RADIATION or other hazards.

B+ CHECK

1) Prepare the test equipment.
2) Use the DC voltameter at DC 370V position to test B+ test point, i.e. B+.

3) Connect the power plug to AC 220V/50Hz, turn on the power switch, wait for normal raster, Check B^+ = 110V±0.2V.

Test point	B+	B1-5V	B2-8V	B3-10V	B4-32V	TH-12V	TH-20V	TH-200V
DC(V)	110	5	8	12	32	12	20(22)	200

INSTALLATION AND SERVICE ADJUSTMENTS

GENERAL

In the majority of cases, a color television receiver will need only slight touch – up adjustment upon installation. Check the basic characteristics such as FS,EHV,and focus. Observe the picture for good black and white details without objectionable color shading. If color shading is evident, demagnetize the receiver.
If color shading still persists, perform purity and convergence adjustments. This should be all that is necessary to achieve optimum receiver perfomance.

FOCUS ADJUSTMENT

Adjust the FOCUS control (on T301) for well defined scanning lines on the picture screen.

HIGH VOLTAGE CHECK

CAUTION: These is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage will be measured below 26.5(20")KV.
4. Vary the BRIGHINESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

General instruction

1. This chassis' EEPROM'(N801 M24C08) should copy standard data, if necessary, deal it with "factory adjustment". If directly use blank EEPROM, should first preset I^2C data, then go on other common alignment. For factory adjustment method, refer to **The appendix: factory menu.**
2. If without special indication, the alignment is conducted on the below condition:
   a) AC power supply 220 V/50 Hz.
   b) The whole unit is preheated for more than 30 min.
3. There is built-in auto degaussing circuit, it will degauss automatically within 1second after turning on.
4. If CRT is with magnetism and affects color purity and convergence, the internal degaussing can not degauss completely, can use degaussor to degauss externally. If color purity and convergence is still poor, then do color purity and convergence adjustment.

Alignment items and procedure

1. B+ voltage check
2. RF AGC voltage adjustment
3. Focus adjustment
4. Screen-grid voltage and white balance adjustment
5. Horizontal,vertical scan center adjustment
6. Horizontal,vertical scan amplitude adjustment
7. Pattern correction adjustment
8. The alignment flow chart see figure below.

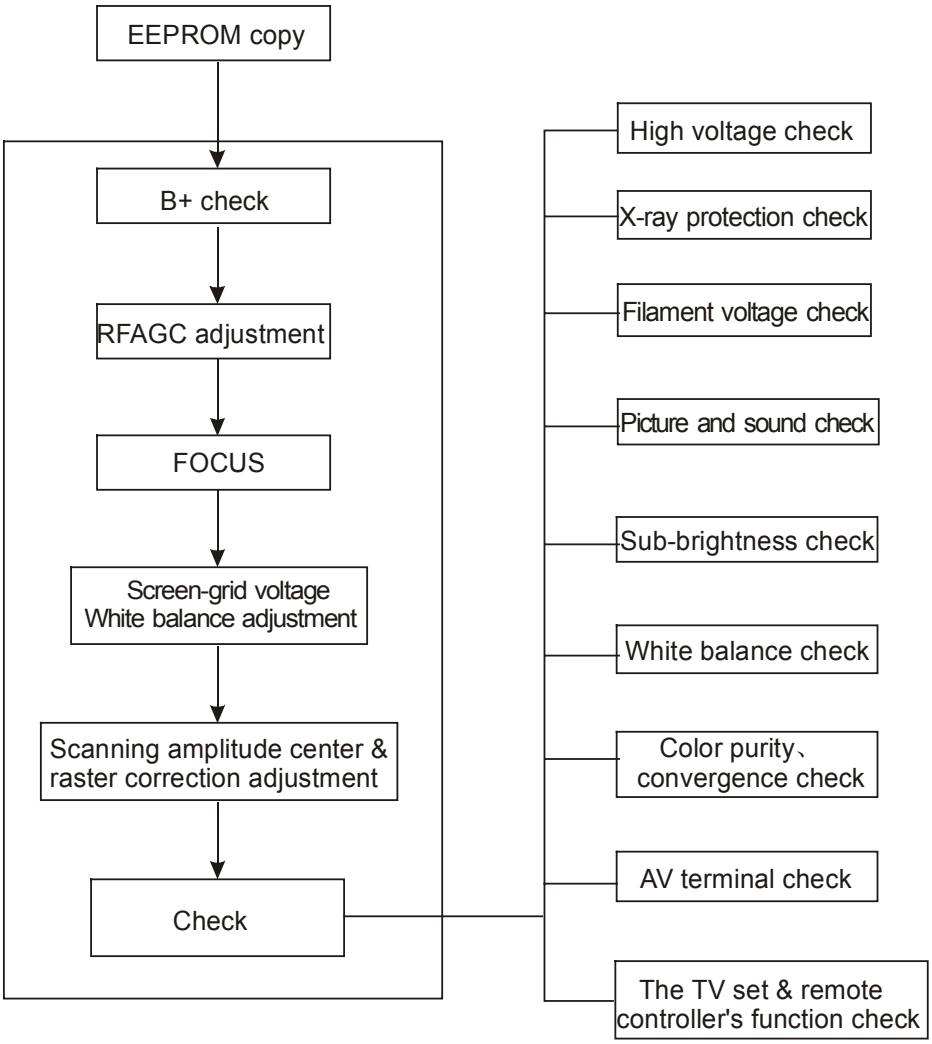


Figure 1: Alignment flow chart

Factory adjustment mode

1. B+ voltage test

a) Make sure the AC power is 220 V/50 Hz

b) Connect digital voltmeter to B+ test point, receive A-7 signal, set picture control to "DYNAMIC" state, test B+, the test voltage should be 100 V±0.5 V (21" PF), or 110V±0.5 V (14" PF AND 21"), or 140V (25").

2. AGC adjustment

a) Receive 60 dB split field A-7 signal.

b) Use oscilloscope or digital voltmeter to monitor test N201 pin 43 voltage (AGC output).

c) enter factory menu, select RF DELAY ADJ, by making use of [←][→] button, increase the value from low to high until the voltage just reach 4.0 V, at this time picture noisy spot should basically disappear, otherwise continue fine tune RF DELAY ADJ

3. Focus adjustment

3. 1 Receive A-12 signal, set user control to "DYNAMIC" state.

3. 2 Adjust FBT's focus potentiometer, to make the screen's B area's focus optimum.

4. Acelerating electrode adjustment method (use A-7 signal)

4.1 Roughly adjust white balance, fix GCUT value, adjust RCUT, BCUT, RDRV, BDRV 's value to make

white balance basically normal.

4.2 Set the color to 0, contrast to 10, use oscilloscope to adjust CRT's red gun's waveform (see below figure), adjust brightness to make the seventh step's (the darkest) DC level be 180V, adjust accelerating electrode to make the seventh step slightly light up (just can separate the seventh step and below dark field).

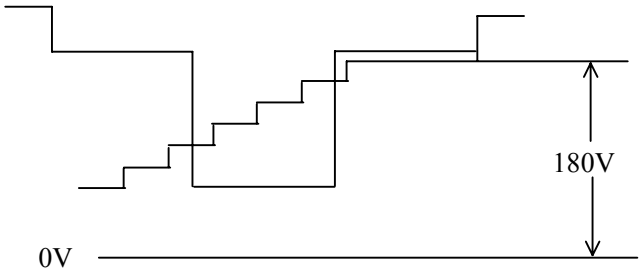


Fig 2: red gun waveform

4.3 Fine adjust white balance (color temperature: 12000K±8MPCD X=0.270±0.008 Y=0.283±0.008)

4.4 Set contrast,brightness,color all to 0, adjust BRTN to make A-7's upper left 2 lattice slightly light up.

5. Horizontal, vertical scan center adjustment

NTSC(60Hz)H-center,V-center adjustment

Receive G23 signal, set user control to "DYNAMIC" state, adjust V-center V-position， H-PHASE to make picture's center be in accordance with screen's center.

6. Vertical scan amplitude adjustment

NTSC(60 Hz)V-amplitude adjustment

Receive D35 signal, set user control to "DYNAMIC" state, adjust V-amplitude V-SIZE to make picture's upper and lower over scanning be screen size's 8%.

Checking point

1. High voltage check

1.1 Connect high voltage meter to CRT's second anode and GND.

1.2 Receive D-8 signal, set user control to "DYNAMIC" state, the high voltage should be 29.0 kV±1 kV (21" PF and 25") or 25.0kV±1kV (14" PF) or 26.5kV±1kV (21").

1.3 When brightness and contrast be set to minimum (zero beam current), the high voltage should not exceed 32 kV.

2. CRT filament voltage check

Receive D-8 signal, set picture control to "DYNAMIC" state, use effective value voltmeter to test CRT filament voltage, the reading should be (6.3±0.3)Vrms.

3. X-ray protection check

3.1 Receive D-8 signal, set user control to "DYNAMIC" state.

3.2 Short R305(TP301,TP302),X-ray protection circuit should effect.

4. Picture and sound check

4.1 Receive standard TV signal.

4.2 Making use of picture control buttons to check color,contrast,brightness,sharpness,tint's control function.

4.3 Making use of sound control buttons to check volume control function.

5. Sub-brightness check

Receive D-8 signal, set color ,contrast,brightness all to 0, picture's left side first grid slightly lights.

6. Color purity and convergence check(Use common regulation)

7. AV terminals (AV IN/OUT check)

8. Other control buttons (on the set and on the remote controller) function check.

Preset the following in factory

1. Picture menu:

CONTRAST	60
BRIGHTNESS	30
COLOR	30
SHARPNESS	30
TINT	±00
PICTURE MODE	PERSONAL
▼MORE	

2. Volume preset to 30.

3. Set OSD language to English.

4. TV mode: channel position number CABLE 3.

Factory menu

1. Enter into factory menu to operate.

1.1 Press factory button ,enter into factory menu.

1.2 Use CH+/CH- button to select the menu, use VOL+/VOL- button to enter the function menu.

1.3 In factory menu status, press MENU button to exit.

2. Factory menu contents

Appendix 1　FACTORY MENU

FACTORY MENU	
1:VDJ ADJ	
1. VIF VCO AUTO ADJ OFF	VIF VCO auto adjustment
2. RF DELAY ADJ	TUNER AGC adjustment
3. S-TRAP ADJ	S-TRAP auto adjustment
2: RASTER ADJ	
1. V-POSITION	Vertical position adjustment（PAL）
2. V-SIZE	Vertical size adjustment
3. H-POSITION	Horizontal position adjustment
4. WHITE BACK	
5. VS-CORRECTION	Vertical S-adjustment
6. V-LINEARITY	Vertical linear adjustment
7. H-POSITION（N）	Horizontal position adjustment
8. V-SIZE（N）	Vertical size adjustment
9. V-SHIFT（N）	Vertical position adjustment
10. VS-CORRECTION（N）	Vertical S-adjustment
11. V-LINEARITY（N）	Vertical linear adjustment
3: CRT ADJ	
1. CUT OFF-R	TV white balance adjustment
2. CUT OFF-G	
3. CUT OFF-B	
4. DRIVE R	
5. DRIVE B	
6. YUV）CUT OFF-R	YUV white balance adjustment
7. YUV）CUT OFF-G	
8.（YUV）CUT OFF-B	
9. YUV）DRIVE-R	
10.（YUV）DRIVE-B	
4: PICTURE ADJ	
1. SUB BRIGHTNESS	Sub-brightness adjustment
2. SUB CONTRAST	Sub-contrast adjustment
5: USER MENU RESET OFF	User menu presetting
6: SERVICE MENU	
1. H VCO ADJ	Horizontal VCO auto adjustment
2. TRAP FINE ADJ	Color trap fine adjustment
3. SUB TINT	TV sub tint
4. SUB TINT AV	AV sub tint
5. SUB TINT YUV	YUV sub tint
6. SUB COLOR	Color adjustment
7. C ANGLE95	
8. TAKE OFF	Color BPF/TAKE OFF on/off
9. OSD LEVEL	OSD level on/off
10. Y-DL	Brightness delaying time
11. Y-DL SECAM	
12. SECAM KILLER	

13. SECAM BGP	
14. VIDEO OUTGAIN	Demodulation output range adjustment
15. OM DET	Over modified detecting on/off
16. S-SLICE DOWN	Sync detecting slice stage
17. AUTO SLICE DN	Auto detecting on/off
18. V SYNC DET	Vertical sync detecting
19. V-1 WINDOW	
20. AFC1 GAIN UP	H AFC1gain
21. AFC2 GAIN DOWNN	H AFC2 gain
22. ABCL	Brightness/contrast auto control
23. ABCL GAIN	Brightness/contrast auto control gain
24. GAMMA	
25. BLACK ST OFF	Black level delay on/off
26. BLACK ST ADJ	
27. BLACK ST GAIN	
28. VIF FREQ	VIF selecting
29. VDL ADJ	
30. UDL ADJ	
31. IC SELECTION	
32. OP PAL-M/N	
33. OP AV-SUSTEM	AV mode
34. AUDIO ATT	Volume output control
35. MONITORING	
36. EEPROM OPTION	EEPROM selecting
37. POW-ON SEARCH	Power-on search selecting
38. OSD H-POSITION	OSD horizontal position adjustment
39. EEP ADJ	EEPROM modifying
40. PIC-DYNAMIC	Dynamic scalar selecting
41. PIC-STANDARD	Standard scalar selecting
42. PIC-SOFT	Soft scalar selecting

CONVERGENCE MAGNET ASSEMBLY POSITIONING

Convergence magnet assembly and rubber wedges need mechanical positioning. Refer to below figure 1.

COLOR PURITY ADJUSTMENT

NOTE: Before attempting any purity adjustment, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the CONTRAST and BRIGHTNESS controls to the maximum.
3. Receive PM5515 monochromatic signal (such as G) to provide a green raster on the screen.
4. Loosen the clamp screw holding the yoke, and slide the yoke backward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet around the neck of the picture tube until the green belt is in the center of the screen. At the same time, center the raster vertically by adjusting the magnet.
7. Move the yoke slowly forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.

8. Check the purity of the red and blue raster.
9. Obtain a white raster, referring to “CRT WHITE BALANCE ADJUSTMENT”.
10. Proceed with convergence adjustment.

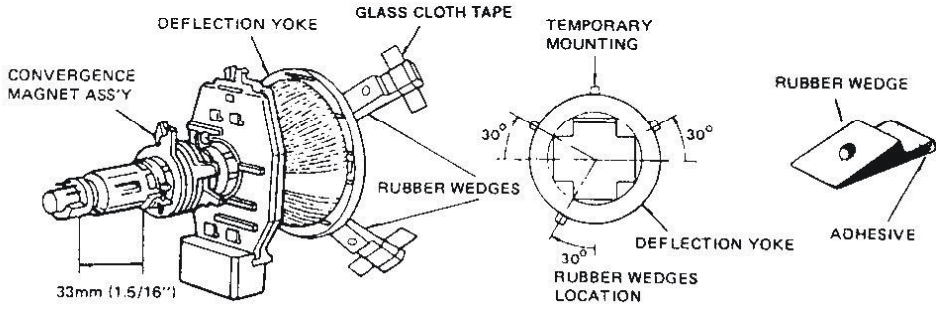


Fig. 1

FIG.3

CONVERGENCE ADJUSTMENT

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

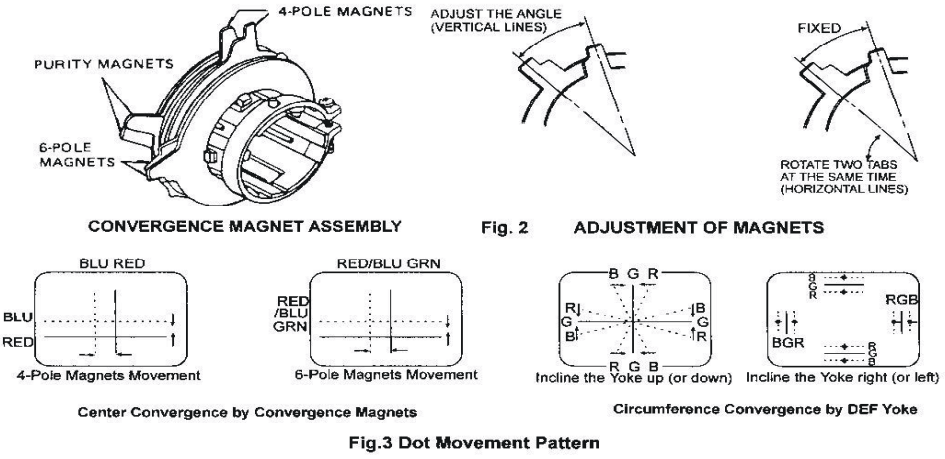
CENTER CONVERGENCE ADJUSTMENT

1. Receive crosshatch pattern with a color bar signal generator.
2. Adjust the BRIGHTNESS and CONTRAST controls for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (see figure 4) and superimpose red and blue vertical lines in the center area of the picture screen. (see figure 5)
4. Turn the both tabs at the same time keeping the constant angle to superimpose red and blue horizontal lines at the center of the screen.(see figure 5)
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line with green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3,4,5, keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets interact and make dot movement complex.

CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1. Loosen the clamping screw of deflection yoke to allow the yoke to tilt.
2. Put a wedge as shown in figure 1 temporarily. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 5). Push the mounted wedge into the space between the picture tube and the yoke to hold the yoke temporarily.
4. Put other wedge into bottom space and remove cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference (see figure 5)

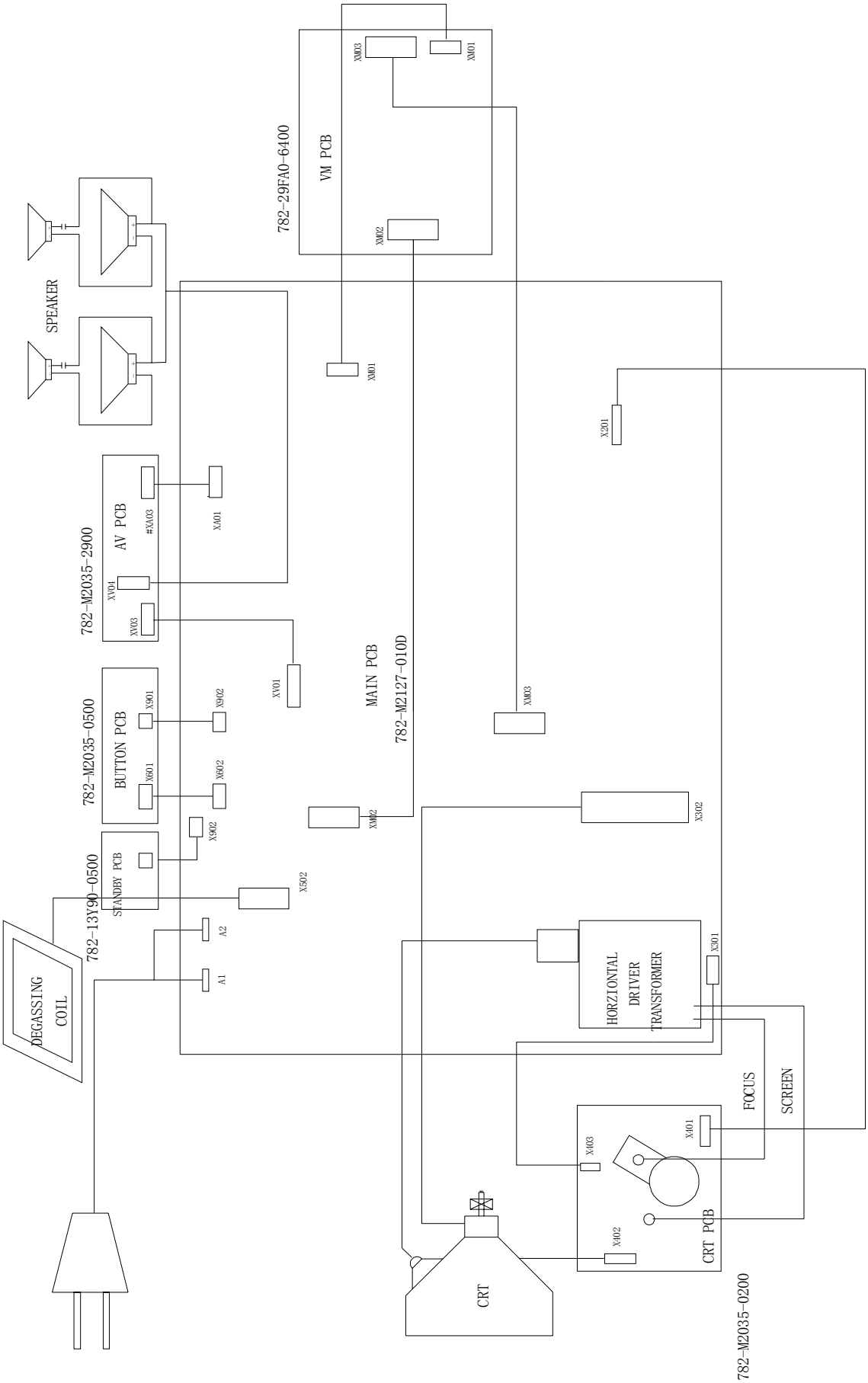
6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on the picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on the picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke tightly in place.
9. Stick three adhesive tapes on wedges as shown in figure 3.



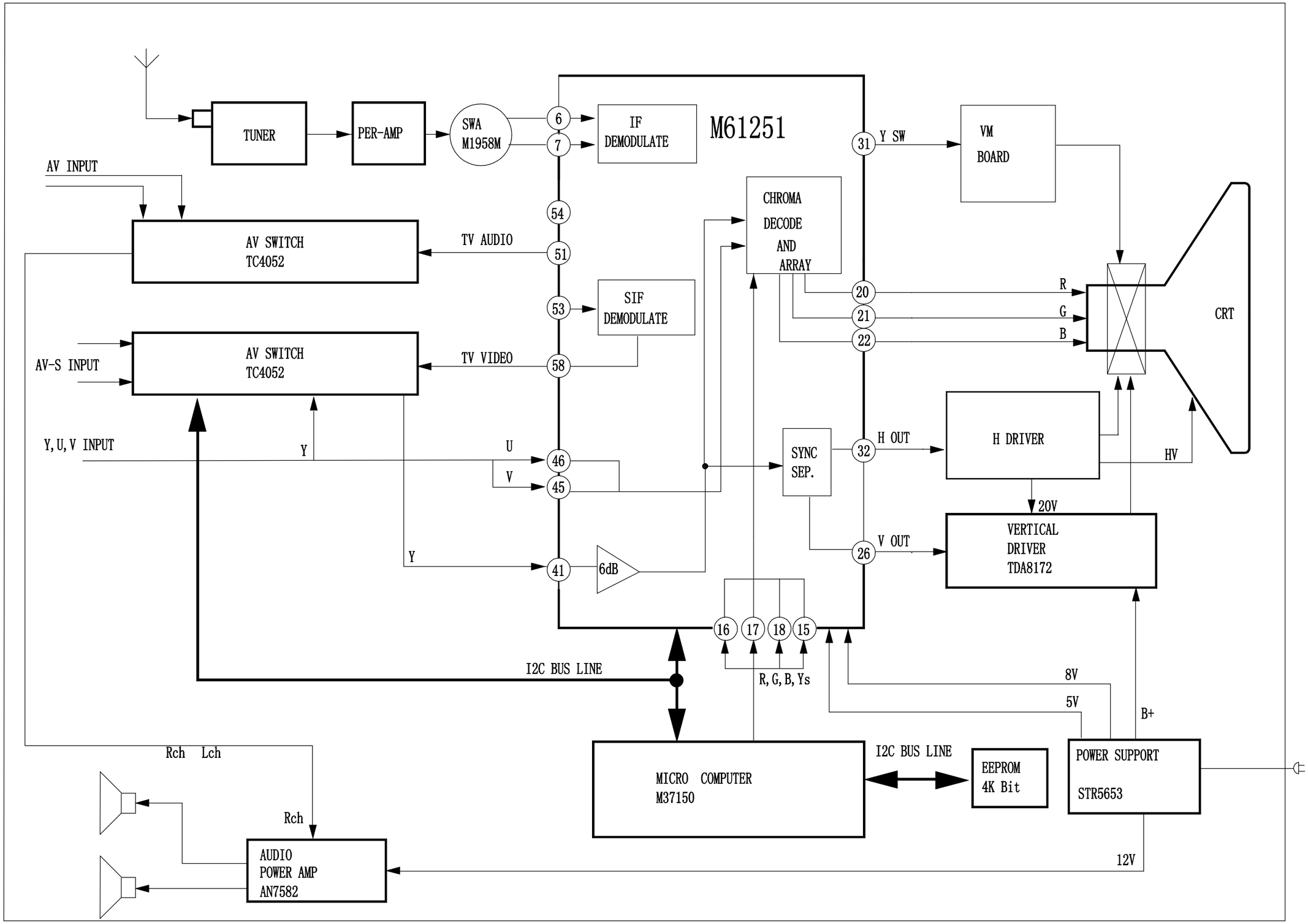
8

Fig5. Dot Movement Pattern

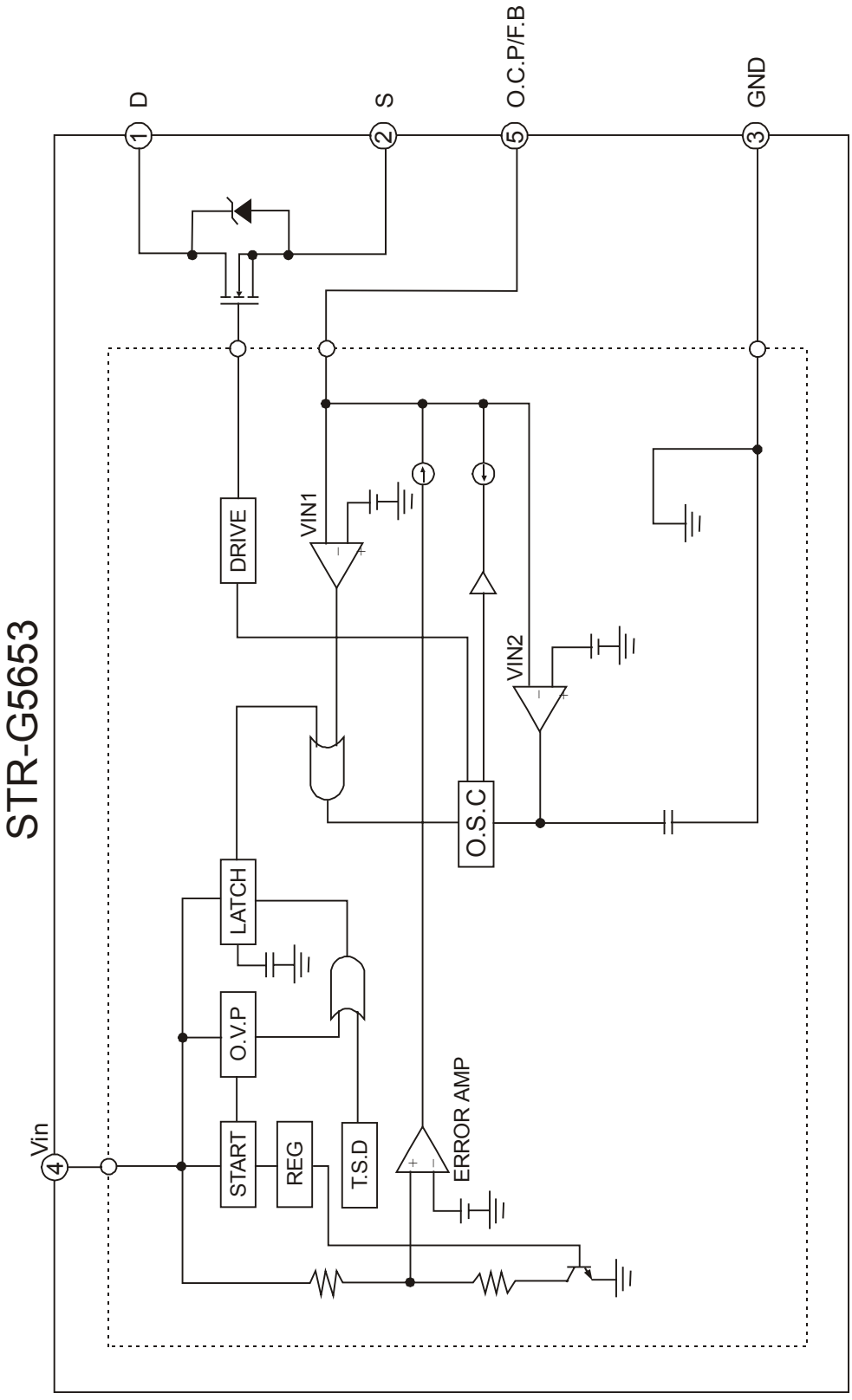
WIRING DIAGRAM

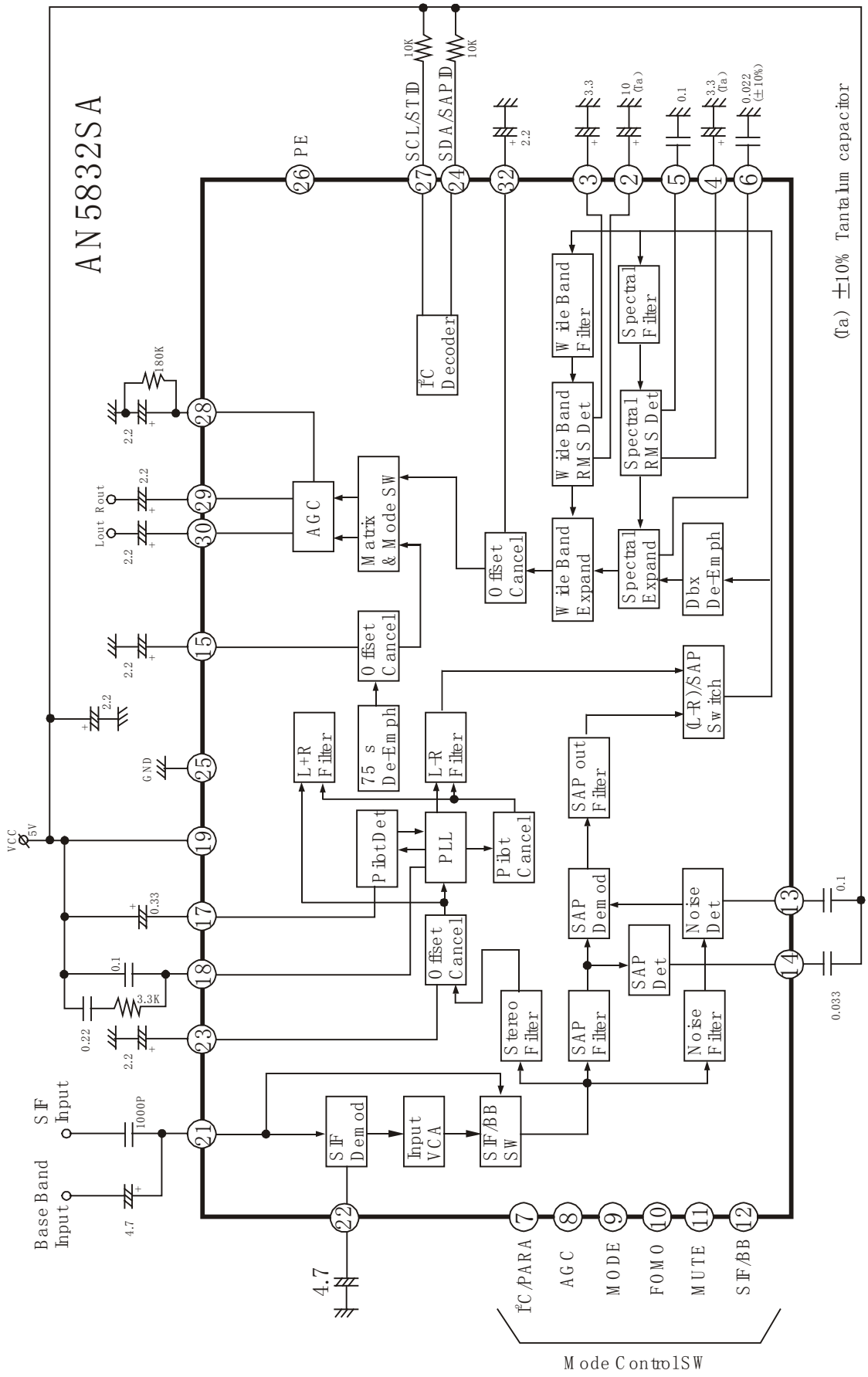


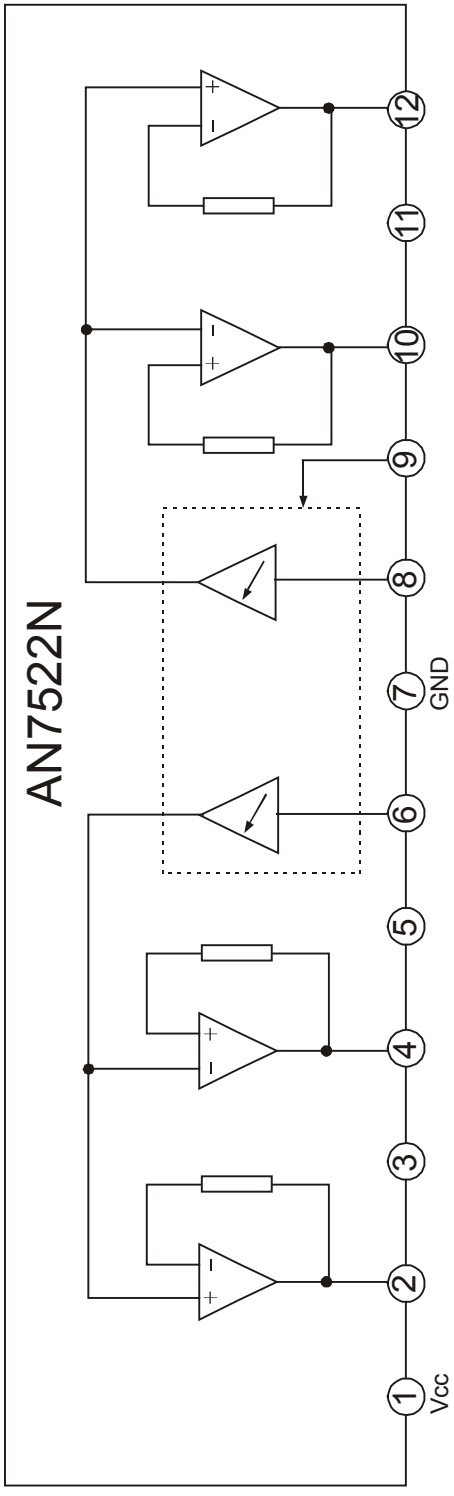
BLOCK DIAGRAM



IC BLOCK DIAGRAM




AN5832SA
(Ta) ±10% Tantalum capacitor
I²C Decoder
Wide Band Filter
Spectral Filter
Wide Band RMS Det
Spectral RMS Det
Wide Band Expand
Spectral Expand
Dbx De-Emph
Offset Cancel
Matrix & Mode SW
AGC
75 s De-Emph
L+R Filter
L-R Filter
(L-R)/SAP Switch
SAP out Filter
Pilot Det
PLL
Pilot Cancel
SAP Demod
SAP Det
Noise Det
SAP Filter
Noise Filter
Stereo Filter
SIF Demod
Input VCA
SIF/BB SW
PE
SCL/STD
SDA/SAPD
VCC
5V
GND
Lout
Rout
SIF Input
Base Band Input
I²C/PARA
AGC
MODE
FOMO
MUTE
SIF/BB
Mode Control SW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9
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1
Vcc

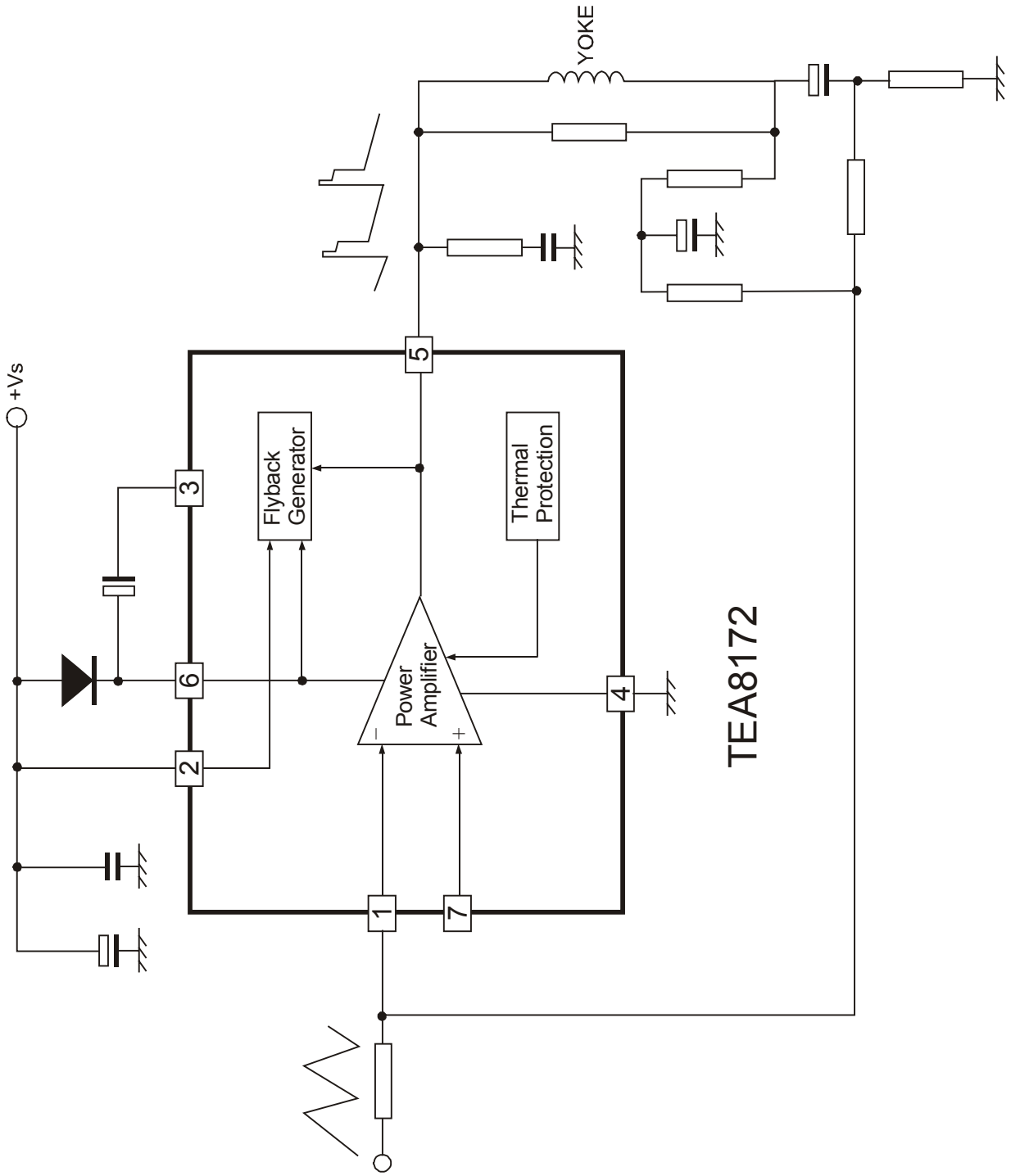
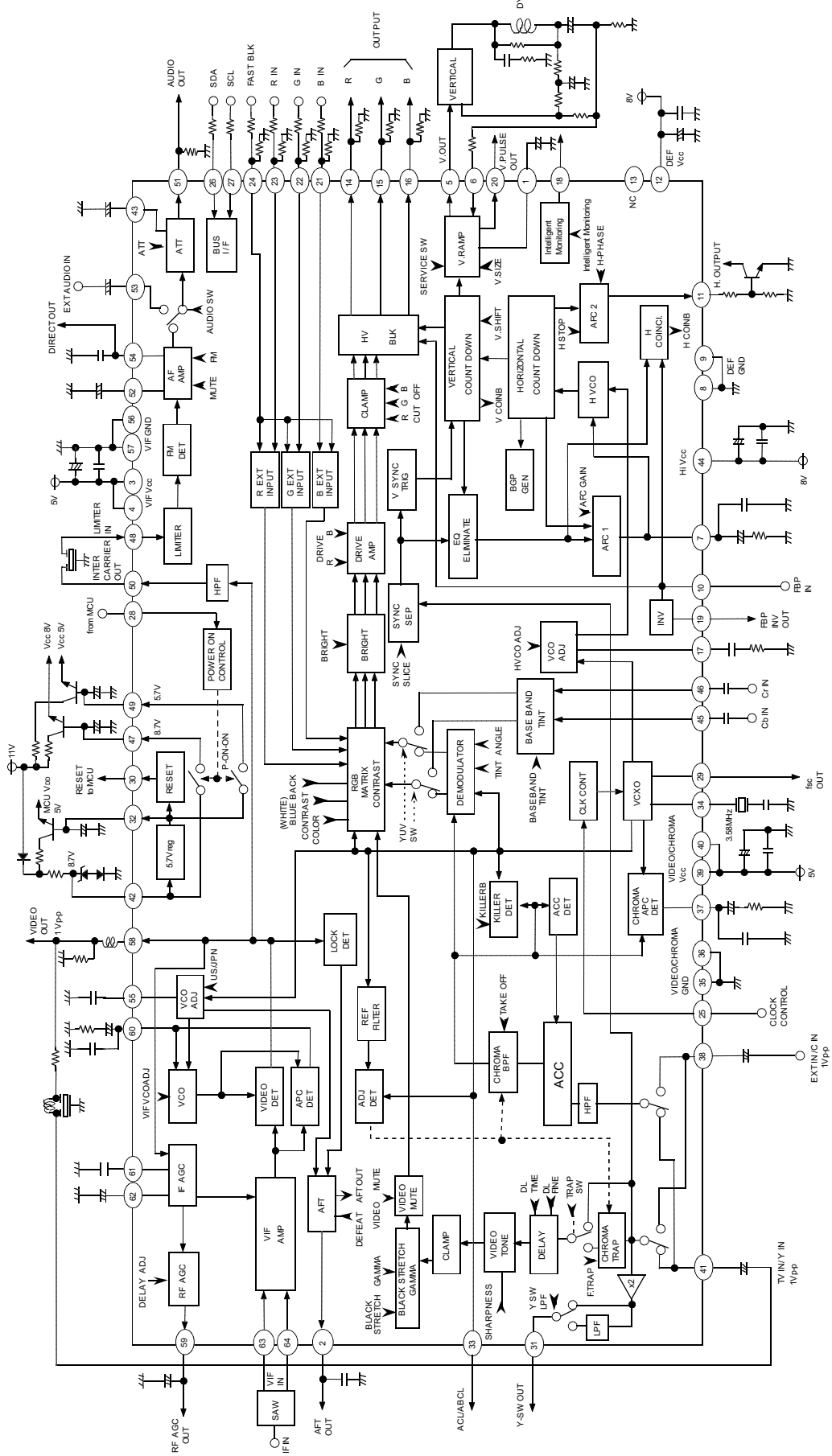
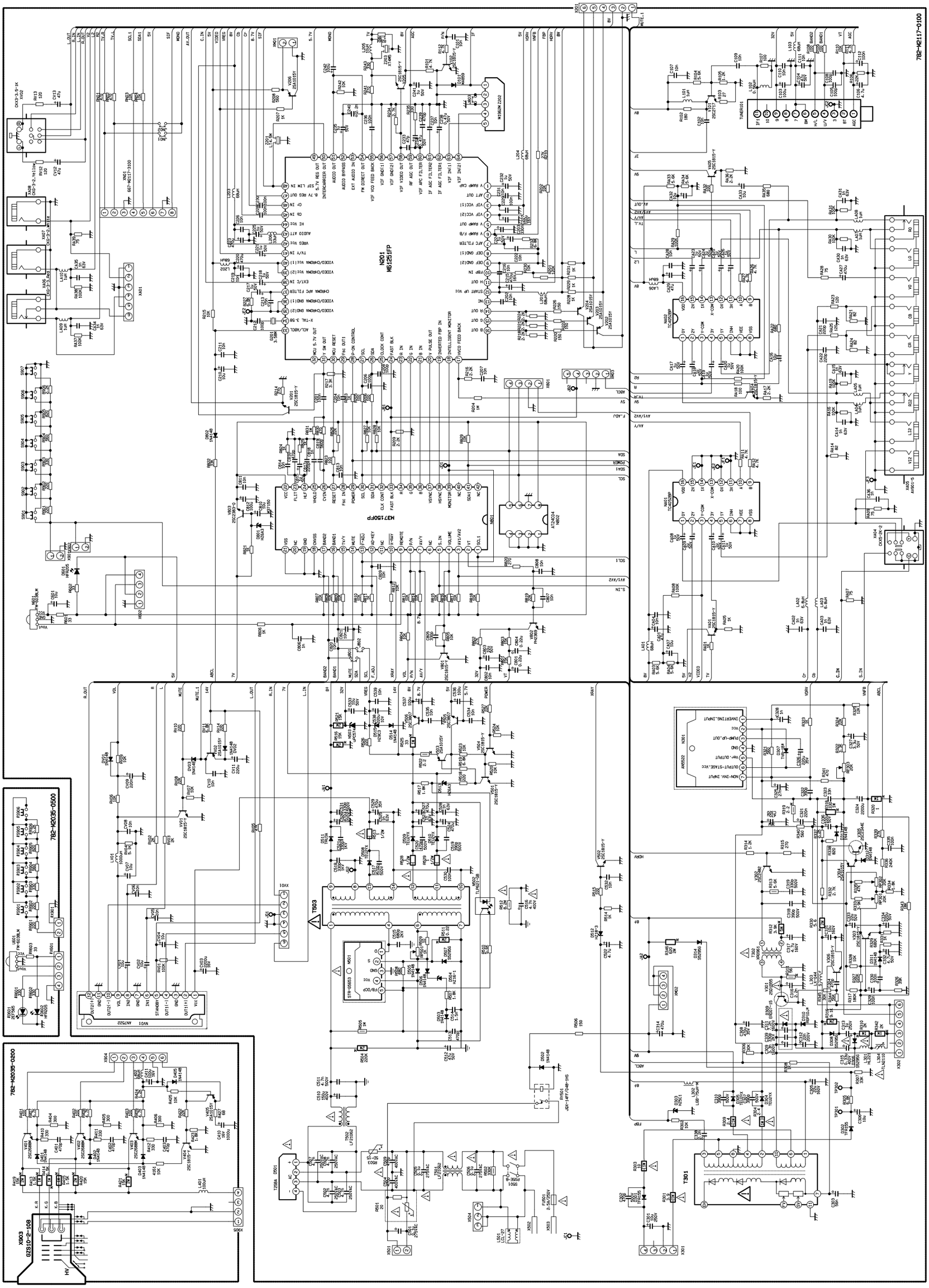

YOKE
+Vs
5
3
6
2
1
7
4
Flyback Generator
Thermal Protection
Power Amplifier
TEA8172

Fig. 1 M61251FP block diagram




782-M2117-0100
782-M2035-0500
782-M2035-0200
N201
M61251FP
M37150FP
T503
T301
X903
GT510-2-108
HV

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PERCAUTION", "SAFETY PRECAUTION" AND "RPODUCT SAFETY NOTICE" ON PAGE 1&2 OF THIS MANUAL.

CAUTION: 1. The shaded areas makes in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with type identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2.
2. Do not degrade the safety of the receiver through improper servicing.

ELECTRICAL PARTS LIST

MAIN BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-M2135-010	MAIN PCB
CRYSTAL		
G201	329-54401-00	JA18 4.433619MHZ
RECTIFIER		
D501	340-80022-00	T2SB60
DIODE		
D503	340-00001-003	1N4148
D506	340-00001-003	1N4148
D514	340-00001-003	1N4148
D802	340-00001-003	1N4148
DV01	340-00001-003	1N4148
DV02	340-00001-003	1N4148
DV03	340-00001-003	1N4148
D507	340-00010-003	S5295G
D306	340-00010-003	S5295G
D307	340-00086-003	TVR-1B
D301	340-00288-003	TFR155
D302	340-00288-003	TFR155
D505	340-00010-00	S5295G
D511	340-00292-00	TRU3A
D304	340-00291-00	TEU2YX
D508	340-00291-00	TEU2YX
D509	340-00291-00	TEU2YX
D510	340-00291-00	TEU2YX

SYMBOL	PART NO.	DESCRIPTION
REGULATED DIODE		
D303	340-50500-003	HZ5C1
D801	340-50550-003	HZ6A3
D515	340-50810-003	HZ9A2
D504	340-51560-003	HZ16-1
D512	340-51850-003	HZ18-3
D513	340-50610-003	HZ6C2
TRANSISTOR		
V202	343-10150-104	2SA1015Y Pr2.5
V203	343-10150-104	2SA1015Y Pr2.5
V204	343-10150-104	2SA1015Y Pr2.5
V503	343-10150-104	2SA1015Y Pr2.5
VV02	343-10150-104	2SA1015Y Pr2.5
V205	343-18150-114	2SC1815-Y
V501	343-18150-114	2SC1815-Y
V502	343-18150-114	2SC1815-Y
V504	343-18150-114	2SC1815-Y
V801	343-18150-114	2SC1815-Y
VV01	343-18150-114	2SC1815-Y
VA01	343-18150-114	2SC1815-Y
V802	343-23690-004	PH2369
V505	343-01800-00	KSE180 TO-126
V506	343-01800-00	KSE180 TO-126
V301	343-18030-80	ST1803DHI
V803	343-23830-60	2SC2383-0
V302	343-24820-00	2SC2482
V101	343-27170-00	2SC2717
CERAMIC CAPACITOR		
C105	459-2110H-102	CC45-CH1H101JYR
C108	459-2110H-102	CC45-CH1H101JYR
C206	459-2110H-102	CC45-CH1H101JYR
C208	459-2110H-102	CC45-CH1H101JYR
C820	459-2110H-102	CC45-CH1H101JYR
C821	459-2110H-102	CC45-CH1H101JYR
C322	459-2110H-102	CC45-CH1H101JYR
C817	459-2122H-102	CC45-CH1H221JYR
CA21	459-2122H-102	CC45-CH1H221JYR
CA22	459-2122H-102	CC45-CH1H221JYR
C807	459-2122H-102	CC45-CH1H221JYR
C805	459-2133K-902	RBU07SL331K-H46CA

SYMBOL	PART NO.	DESCRIPTION
C808	459-2133K-902	RBU07SL331K-H46CA
C239	459-2147H-902	CC1-12-SL-63V-471J
C513	459-2147H-902	CC1-12-SL-63V-471J
C816	459-2147H-902	CC1-12-SL-63V-471J
C819	459-2156K-002	CT1-06-2B4-63V-561K
C523	459-2210K-002	CK45-B1H102KYR
C525	459-2210K-002	CK45-B1H102KYR
C528	459-2210K-002	CK45-B1H102KYR
CA02	459-2210K-002	CK45-B1H102KYR
CA03	459-2210K-002	CK45-B1H102KYR
CA14	459-2210K-002	CK45-B1H102KYR
CA15	459-2210K-002	CK45-B1H102KYR
CA30	459-2210K-002	CK45-B1H102KYR
CA31	459-2210K-002	CK45-B1H102KYR
CA34	459-2210K-002	CK45-B1H102KYR
CA35	459-2210K-002	CK45-B1H102KYR
C806	459-2210K-002	CK45-B1H102KYR
C818	459-2210K-002	CK45-B1H102KYR
C107	459-2310R-002	CK45-F1H103ZYR
C102	459-2310R-002	CK45-F1H103ZYR
C204	459-2310R-002	CK45-F1H103ZYR
C211	459-2310R-002	CK45-F1H103ZYR
C216	459-2310R-002	CK45-F1H103ZYR
C219	459-2310R-002	CK45-F1H103ZYR
C222	459-2310R-002	CK45-F1H103ZYR
C226	459-2310R-002	CK45-F1H103ZYR
C231	459-2310R-002	CK45-F1H103ZYR
C812	459-2310R-002	CK45-F1H103ZYR
C814	459-2310R-002	CK45-F1H103ZYR
CA04	459-2310R-002	CK45-F1H103ZYR
CA29	459-2310R-002	CK45-F1H103ZYR
CV05	459-2310R-002	CK45-F1H103ZYR
CV06	459-2310R-002	CK45-F1H103ZYR
CV08	459-2310R-002	CK45-F1H103ZYR
CV10	459-2310R-002	CK45-F1H103ZYR
C111	459-2310R-002	CK45-F1H103ZYR
C109	459-2310R-002	CK45-F1H103ZYR
C532	459-2310R-002	CK45-F1H103ZYR
C539	459-2310R-002	CK45-F1H103ZYR
C809	459-2310R-002	CK45-F1H103ZYR

SYMBOL	PART NO.	DESCRIPTION
C802	459-2310R-002	CK45-F1H103ZYR
C202	459-2310R-002	CK45-F1H103ZYR
C228	459-2410R-002	DD308-63F104Z50
C229	459-2410R-002	DD308-63F104Z50
C230	459-2410R-002	DD308-63F104Z50
C530	459-2410R-002	DD308-63F104Z50
C201	459-2410R-002	DD308-63F104Z50
C236	459-2410R-002	DD308-63F104Z50
C237	459-2410R-002	DD308-63F104Z50
C813	459-2410R-002	DD308-63F104Z50
C319	459-5133K-002	RQC05B331K-H46CA
C307	459-5139K-002	CK45-B2H391KYR
C318	459-5139K-002	CK45-B2H391KYR
C519	459-5139K-002	CK45-B2H391KYR
C302	459-5147K-002	RQC05B471K-H46CA
C517	459-5147K-002	RQC05B471K-H46CA
C520	459-5147K-002	RQC05B471K-H46CA
C225	459-2118H-102	CC45-CH1H181JYR
C207	459-2410R-002	DD308-63F104Z50
C504	459-B147M-20	ECK-DNS471MBX
C509	459-B147M-20	ECK-DNS471MBX
C516	459-B222M-20	ECK-DNS222MEX
C502	459-B247R-00	DE0807F472ZAC250V
C503	459-B247R-00	DE0807F472ZAC250V
C507	459-B247R-00	DE0807F472ZAC250V
C508	459-B247R-00	DE0807F472ZAC250V
C531	459-5210K-00	RQC07B102K-H46CA
C518	459-6133K-00	DE0405B331K1K
C521	459-6133K-00	DE0405B331K1K
C511	459-6310R-00	DE1510E103Z1K
C515	459-8168K-00	DE0707B681K2K
C106	459-2310R-00	CT1-08-2F4-63V-103Z
C212	459-2015H-10	CC1-06-CH-63V-15PF-J
C339	459-8133K-00	DE0707B331K2K
Z201	459-2410R-00	DD308-63F104Z50
C824	459-2110H-10	CC1-10-CH-63V-101J
C825	459-2110H-10	CC1-10-CH-63V-101J
C245	459-2410R-00	DD308-63F104Z50
C246	459-2410R-00	DD308-63F104Z50
THIN-FILM CAPACITOR		

SYMBOL	PART NO.	DESCRIPTION
C321	462-B0422-H02	CL21X-50V-0.22uF-J
CV09	462-B0422-H02	CL21X-50V-0.22uF-J
C328	462-00210-H02	CL11-100V-1000PF-J
C514	462-00210-H02	CL11-100V-1000PF-J
C316	462-00222-H02	CL11-100V-2200PF-J
C213	462-00315-H02	CL11-100V-0.015uF-J
C325	462-00327-K02	CL11-100V-0.027uF-K
C303	462-00356-H02	CL11-100V-0.056uF-J
C315	462-53433-H0	CBB13-200V-0.33uF-J
C501	462-2B410-M0V	250VAC-0.1uF-M
C505	462-2B410-M0V	250VAC-0.1uF-M
C506	462-2B410-M0V	250VAC-0.1uF-M
C309	462-88233-H0	CBB81-1600V-3300PF-J
C311	462-88256-H0	ECWH12H562JR
C203	462-B0433-H0	CL21X-50V-0.33uF-J
C240	462-00233-H0	CL11-100V-3300PF-J
C112	462-90410-H0	63V-0.1uF-J
C232	462-90410-H0	63V-0.1uF-J
C801	462-90422-H0	50V-0.22uF-J
C804	462-90422-H0	50V-0.22uF-J
C323	462-B0322-H0	CL21X-50V-0.022uF-J
ELECTROLYTIC CAPACITOR		
C210	464-6D610-M02	CD110-16V-10uF-M
C810	464-6D610-M02	CD110-16V-10uF-M
CV01	464-6D610-M02	CD110-16V-10uF-M
CV02	464-6D610-M02	CD110-16V-10uF-M
CV04	464-6D610-M02	CD110-16V-10uF-M
CV07	464-6D610-M02	CD110-16V-10uF-M
CA01	464-6D647-M02	CD110-16V-47uF-M
CA28	464-6D647-M02	CD110-16V-47uF-M
C242	464-6D710-M02	CD110-16V-100uF-M
C536	464-6D710-M02	CD110-16V-100uF-M
C811	464-6D710-M02	CD110-16V-100uF-M
C227	464-6D710-M02	CD110-16V-100uF-M
CV11	464-6D722-M02	CD110-16V-220uF-M
C537	464-6D747-M02	CD110-16V-470uF-M
C522	464-6E547-M02	CD110-25V-4.7uF-M
C306	464-6E610-M02	CD110-25V-10uF-M
C326	464-6F722-M02	CD110-35V-220uF-M
C234	464-60447-M02	CD110-50V-0.47uF-M

SYMBOL	PART NO.	DESCRIPTION
C217	464-60510-M02	CD110-50V-1uF-M
C218	464-60510-M02	CD110-50V-1uF-M
C221	464-60510-M02	CD110-50V-1uF-M
C224	464-60510-M02	CD110-50V-1uF-M
CA08	464-60510-M02	CD110-50V-1uF-M
CA09	464-60510-M02	CD110-50V-1uF-M
CA10	464-60510-M02	CD110-50V-1uF-M
CA11	464-60510-M02	CD110-50V-1uF-M
CA17	464-60510-M02	CD110-50V-1uF-M
CA18	464-60510-M02	CD110-50V-1uF-M
CA19	464-60510-M02	CD110-50V-1uF-M
CA20	464-60510-M02	CD110-50V-1uF-M
CA23	464-60510-M02	CD110-50V-1uF-M
CA24	464-60510-M02	CD110-50V-1uF-M
CA25	464-60510-M02	CD110-50V-1uF-M
CA26	464-60510-M02	CD110-50V-1uF-M
C327	464-60533-M02	CD110-50V-3.3uF-M
C241	464-60533-M02	CD110-50V-3.3uF-M
C533	464-60610-M02	CD110-50V-10uF-M
C803	464-60610-M02	CD110-50V-10uF-M
C104	464-60647-M02	CD110-50V-47uF-M
C317	464-62547-M02	CD288-160V-4.7uF-M
C313	464-65510-M02	CD288-250V-1uF-M
CA07	464-6D710-M02	CD110-16V-100uF-M
CA32	464-6D710-M02	CD110-16V-100uF-M
C510	464-07715-M0R	CD293X-400V-150uF-M
C526	464-04747-M0R	200USP470MA35
C538	464-6C722-M0	CD110-10V-220uF-M
C220	464-6D747-M0	CD110-16V-470uF-M
C215	464-6D810-M0	CD110-16V-1000uF-M
C223	464-6D810-M0	CD110-16V-1000uF-M
CV03	464-6D822-M0	CD110-16V-2200uF-M
C524	464-6E747-M0	CD110-25V-470uF-M
C527	464-6E747-M0	CD110-25V-470uF-M
C324	464-6E822-M0	CD110-25V-2200uF-M
C308	464-6F747-M0	CD110-35V-470uF-M
C320	464-6F747-M0	CD110-35V-470uF-M
C529	464-6F747-M0	CD110-35V-470uF-M
C235	464-60510-M0	CD110-50V-1uF-M
C815	464-60510-M0	CD110-50V-1uF-M

SYMBOL	PART NO.	DESCRIPTION
C512	464-60647-M0	CD110-50V-47uF-M
C305	464-62622-M0	CD288-160V-22uF-M
C301	464-65610-M0	CD288-250V-10uF-M
C238	464-60422-M0	CD110-50V-0.22uF-M
C534	464-6D610-M0	CD110-16V-10uF-M
C535	464-6D610-M0	CD110-16V-10uF-M
CARBON RESISTOR		
R821	467-1C122-H03	1/6W-220Ω-J
R106	467-1C322-H03	1/6W-22K-J
R103	467-1C027-H03	1/6W-27Ω-J
RA09	467-1C075-H03	1/6W-75Ω-J
RA39	467-1C075-H03	1/6W-75Ω-J
RA14	467-1C082-H03	1/6W-82Ω-J
RA21	467-1C082-H03	1/6W-82Ω-J
RA24	467-1C082-H03	1/6W-82Ω-J
R107	467-1C110-H03	1/6W-100Ω-J
R108	467-1C110-H03	1/6W-100Ω-J
R109	467-1C110-H03	1/6W-100Ω-J
R205	467-1C110-H03	1/6W-100Ω-J
R206	467-1C110-H03	1/6W-100Ω-J
R823	467-1C110-H03	1/6W-100Ω-J
R515	467-1C110-H03	1/6W-100Ω-J
R830	467-1C110-H03	1/6W-100Ω-J
RA01	467-1C110-H03	1/6W-100Ω-J
RA23	467-1C112-H03	1/6W-120Ω-J
RA25	467-1C112-H03	1/6W-120Ω-J
R220	467-1C115-H03	1/6W-150Ω-J
R222	467-1C115-H03	1/6W-150Ω-J
R226	467-1C115-H03	1/6W-150Ω-J
R102	467-1C118-H03	1/6W-180Ω-J
R820	467-1C118-H03	1/6W-180Ω-J
R322	467-1C324-H03	1/6W-24K-J
RV10	467-1C122-H03	1/6W-220Ω-J
R518	467-1C122-H03	1/6W-220Ω-J
RV14	467-1C122-H03	1/6W-220Ω-J
R241	467-1C127-H03	1/6W-270Ω-J
RA05	467-1C127-H03	1/6W-270Ω-J
R235	467-1C133-H03	1/6W-330Ω-J
R234	467-1C147-H03	1/6W-470Ω-J
RN03	467-1C147-H03	1/6W-470Ω-J

SYMBOL	PART NO.	DESCRIPTION
RN04	467-1C147-H03	1/6W-470Ω-J
R508	467-1C168-H03	1/6W-680Ω-J
RA22	467-1C168-H03	1/6W-680Ω-J
RA35	467-1C168-H03	1/6W-680Ω-J
R203	467-1C210-H03	1/6W-1K-J
R228	467-1C210-H03	1/6W-1K-J
R229	467-1C210-H03	1/6W-1K-J
R231	467-1C210-H03	1/6W-1K-J
R323	467-1C210-H03	1/6W-1K-J
R824	467-1C210-H03	1/6W-1K-J
R825	467-1C210-H03	1/6W-1K-J
R514	467-1C210-H03	1/6W-1K-J
R806	467-1C210-H03	1/6W-1K-J
R811	467-1C210-H03	1/6W-1K-J
R314	467-1C212-H03	1/6W-1.2K-J
R321	467-1C212-H03	1/6W-1.2K-J
R105	467-1C212-H03	1/6W-1.2K-J
R244	467-1C218-H03	1/6W-1.8K-J
R507	467-1C218-H03	1/6W-1.8K-J
R517	467-1C218-H03	1/6W-1.8K-J
R218	467-1C222-H03	1/6W-2.2K-J
R221	467-1C222-H03	1/6W-2.2K-J
R224	467-1C222-H03	1/6W-2.2K-J
R209	467-1C222-H03	1/6W-2.2K-J
R217	467-1C233-H03	1/6W-3.3K-J
R111	467-1C247-H03	1/6W-4.7K-J
RA11	467-1C247-H03	1/6W-4.7K-J
RA12	467-1C247-H03	1/6W-4.7K-J
RA26	467-1C247-H03	1/6W-4.7K-J
RA27	467-1C247-H03	1/6W-4.7K-J
RV04	467-1C251-H03	1/6W-5.1K-J
R510	467-1C256-H03	1/6W-5.6K-J
RA03	467-1C256-H03	1/6W-5.6K-J
RA04	467-1C256-H03	1/6W-5.6K-J
RA33	467-1C256-H03	1/6W-5.6K-J
RA34	467-1C256-H03	1/6W-5.6K-J
R104	467-1C256-H03	1/6W-5.6K-J
R227	467-1C268-H03	1/6W-6.8K-J
R232	467-1C268-H03	1/6W-6.8K-J
R305	467-1C268-H03	1/6W-6.8K-J

SYMBOL	PART NO.	DESCRIPTION
R519	467-1C268-H03	1/6W-6.8K-J
RV11	467-1C268-H03	1/6W-6.8K-J
R810	467-1C310-H03	1/6W-10K-J
R110	467-1C310-H03	1/6W-10K-J
R202	467-1C310-H03	1/6W-10K-J
R215	467-1C310-H03	1/6W-10K-J
R230	467-1C310-H03	1/6W-10K-J
R242	467-1C310-H03	1/6W-10K-J
R302	467-1C310-H03	1/6W-10K-J
R520	467-1C310-H03	1/6W-10K-J
R523	467-1C310-H03	1/6W-10K-J
R524	467-1C310-H03	1/6W-10K-J
R804	467-1C310-H03	1/6W-10K-J
R805	467-1C310-H03	1/6W-10K-J
R807	467-1C310-H03	1/6W-10K-J
R808	467-1C310-H03	1/6W-10K-J
R809	467-1C310-H03	1/6W-10K-J
R812	467-1C310-H03	1/6W-10K-J
R813	467-1C310-H03	1/6W-10K-J
R814	467-1C310-H03	1/6W-10K-J
R815	467-1C310-H03	1/6W-10K-J
R816	467-1C310-H03	1/6W-10K-J
R817	467-1C310-H03	1/6W-10K-J
R818	467-1C310-H03	1/6W-10K-J
R827	467-1C310-H03	1/6W-10K-J
R828	467-1C310-H03	1/6W-10K-J
R829	467-1C310-H03	1/6W-10K-J
RN01	467-1C310-H03	1/6W-10K-J
RN02	467-1C310-H03	1/6W-10K-J
RV06	467-1C310-H03	1/6W-10K-J
RV07	467-1C310-H03	1/6W-10K-J
RV09	467-1C310-H03	1/6W-10K-J
R819	467-1C315-H03	1/6W-15K-J
R801	467-1C315-H03	1/6W-15K-J
R803	467-1C315-H03	1/6W-15K-J
R324	467-1C322-H03	1/6W-22K-J
R527	467-1C322-H03	1/6W-22K-J
R826	467-1C322-H03	1/6W-22K-J
RV08	467-1C322-H03	1/6W-22K-J
R325	467-1C322-H03	1/6W-22K-J

SYMBOL	PART NO.	DESCRIPTION
J256	467-1C322-H03	1/6W-22K-J
R802	467-1C327-H03	1/6W-27K-J
R306	467-1C330-H03	1/6W-30K-J
R822	467-1C333-H03	1/6W-33K-J
RV05	467-1C410-H03	1/6W-100K-J
RA08	467-1C410-H03	1/6W-100K-J
RA16	467-1C410-H03	1/6W-100K-J
RA19	467-1C410-H03	1/6W-100K-J
RA20	467-1C410-H03	1/6W-100K-J
RA29	467-1C410-H03	1/6W-100K-J
RA30	467-1C410-H03	1/6W-100K-J
RA31	467-1C410-H03	1/6W-100K-J
RA37	467-1C410-H03	1/6W-100K-J
RA38	467-1C410-H03	1/6W-100K-J
RV01	467-1C410-H03	1/6W-100K-J
R201	467-1C412-H03	1/6W-120K-J
R831	467-1C510-H03	1/6W-1M-J
R509	467-1D047-H03	RT14-1/4W-47Ω-J
R311	467-1D056-H03	RT14-1/4W-56Ω-J
R308	467-1D210-H03	RT14-1/4W-1K-J
R505	467-1E510-H03	1/2W-1M-J
R526	467-1C118-H03	1/6W-180Ω-J
J281	467-1C047-H03	1/6W-47Ω-J
J344	467-1C047-H03	1/6W-47Ω-J
RV02	467-1C320-H03	1/6W-20K-J
RV03	467-1C320-H03	1/6W-20K-J
R307	467-1C324-H03	1/6W-24K-J
R243	467-1C182-H03	1/6W-820Ω-J
R216	467-1C222-H03	1/6W-2.2K-J
R204	467-1C510-H0	1/6W-1M-J
RA07	467-1C075-H0	1/6W-75Ω-J
R315	467-1C127-H0	1/6W-270Ω-J
INDUCTANCE WITH COLOUR CODES		
L102	471-2B56K-003	SPT0305-R56K-5
L103	471-2068K-103	LGA0410-68uH-K
L201	471-2068K-103	LGA0410-68uH-K
L202	471-2068K-103	LGA0410-68uH-K
L203	471-2068K-103	LGA0410-68uH-K
L204	471-2068K-103	LGA0410-68uH-K
L206	471-2033K-00	SPT0305-330K-5

SYMBOL	PART NO.	DESCRIPTION
LA01	471-1068H-00	EL0606SKI-680J
LA06	471-1068H-00	EL0606SKI-680J
LA02	471-2A82K-00	SPT0305-8R2K-5
LA03	471-2A82K-00	SPT0305-8R2K-5
L101	471-2B56K-00	SPT0305-R56K-5
LA04	471-2001K-A0	SP0203-1uH-K
LA05	471-2001K-A0	SP0203-1uH-K
LA07	471-2001K-A0	SP0203-1uH-K
LA08	471-2001K-A0	SP0203-1uH-K
LA09	471-2001K-A0	SP0203-1uH-K
LA10	471-2001K-A0	SP0203-1uH-K
LV01	471-2210K-10	LGA0410-1000uH-K
IC		
N503	352-05740-00	uPC574
N502	352-06210-70	TLP621-GB(UL)
N802	352-24080-50	M24C08BN6
N201	352-61264-70	M61264
NA02	352-40520-60	TC4052BP
NA01	352-40520-60	TC4052BP
N501	352-56530-00	STR-G5653
NV01	352-75220-00	AN7522N
N301	352-81720-10	TDA8172
N801	352-37160-40	M37160M8-051FP
POWER SWITCH		
S501	360-30028-00	KDC-A04-S
METAL RESISTOR		
R320	467-2F002-H0	1W-2Ω-JL
R312	467-20239-HB	RYG2-5W-3.9K-J-A
R319	467-2EA22-H0	1/2W-2.2Ω-JL
R522	467-2EA22-H0	1/2W-2.2Ω-JL
R313	467-2E256-H0	1/2W-5.6kΩ-JL
R516	467-2G315-H0	2W-15kΩ-JL
R521	467-2G315-H0	2W-15kΩ-JL
R525	467-2F033-H0	1W-33Ω-JL
R318	467-2F115-H0	1W-150Ω-JL
R310	467-2F220-H0	1W-2KΩ-JL
R511	467-2GB15-H0	2W-0.15Ω-JL
R504	467-2G422-H0	2W-220K-JL
R342	467-2F220-H0	1W-2KΩ-JL
MELTABLE RESISTOR		

SYMBOL	PART NO.	DESCRIPTION
R513	467-4EB33-H0	1/2W-0.33Ω-JL
R528	467-4E001-H0	1/2W-1Ω-JL
R529	467-4E001-H0	1/2W-1Ω-JL
R304	467-4FA24-H0	1W-2.4Ω-JL
R301	467-4FA39-H0	1W-3.9Ω-JL
R303	467-4F010-H0	1W-10Ω-JL
CARBON RESISTOR		
R502	467-8E433-H0	1/2W-330kΩ-JL
R512	467-8E582-H0A	1/2W-8.2MΩ-J
POTENTIOMETER		
RP501	468-01108-00	GVA061-100Ω±20%
THERMISTOR		
R501	469-10023-00	96708 (9Ω)
R503	469-40004-00	5D2-14LC
SWITCH TRANSFORMER		
T503	470-00272-00	SR3601B
H-DRIVE TRANSFORMER		
T302	472-10001-00	XR0961
H-LINEARITY COIL		
L301	477-00083-00	LX221
ADJUSTABLE INDUCTANCE		
L304	477-30019-00	TLN2120B
POWER FILTER		
T501	477-20009-00	LF21062
T502	477-20009-00	LF21062
FIXED INDUCTANCE		
L302	477-40031-00	LG750
FBT		
T301	472-24207-00	BSC25-3368K!
FUSE BASE		
FU501	364-77511-00	
STERMINAL		
XA04	364-91202-00	CKX5-2K-2
AV SOCKET		
XA05	364-98205-00	AV901-6
SYMBOL	**PART NO.**	**DESCRIPTION**
SAW FILTER		
Z202	458-04016-00	K2959M
OTHER		
TUNER	590-30420-00	TDQ-3B9H/116X

SYMBOL	PART NO.	DESCRIPTION
FUSE（FU501）	569-13141-80	50T T3.15AL250V
DEGAUSSING COIL	477-12103-00	DGC-37-54(cm)
CRT	335-2112C-00	54SX503Y22-DC01
POWER CORD	493-65710-07	VDE
ANTENNA	596-20051-01	TL7-218-Ⅱ-3Q
IMPEDANCE TRANSFORMER	468-91301-00	ZKP-1

CRT BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-J2130-020	CRT PCB
DIODE		
VD401	340-00001-00	1N4148
VD402	340-00001-00	1N4148
VD403	340-00001-00	1N4148
TRANSISTOR		
V404	343-18150-10	2SC1815-Y
V401	343-26880-60	2SC2688M
V402	343-26880-60	2SC2688M
V403	343-26880-60	2SC2688M
CRT SOCKET		
	364-58204-00	GZS8-17(UL)
CERAMIC CAPACITOR		
C401	459-2127H-90	CC1-08-SL-63V-271J
C402	459-2127H-90	CC1-08-SL-63V-271J
C403	459-2127H-90	CC1-08-SL-63V-271J
C406	459-5147K-00	RQC05B471K-H46CA
C407	459-8222K-00	DE1005B222K2K
ELECTROLYTIC CAPACITOR		
C411	464-6D722-M0	CD110-16V-220uF-M
C409	464-65610-M0	CD288-250V-10uF-M
CARBON RESISTOR		
R401	467-1C110-H0	1/6W-100Ω-J
R402	467-1C110-H0	1/6W-100Ω-J
R403	467-1C110-H0	1/6W-100Ω-J
R404	467-1C143-H0	1/6W-430Ω-J
R405	467-1C143-H0	1/6W-430Ω-J
R406	467-1C143-H0	1/6W-430Ω-J
R407	467-1C227-H0	1/6W-2.7K-J

SYMBOL	PART NO.	DESCRIPTION
R408	467-1C227-H0	1/6W-2.7K-J
R409	467-1C227-H0	1/6W-2.7K-J
R417	467-1C310-H0	1/6W-10K-J
R422	467-1C322-H0	1/6W-22K-J
R423	467-1C322-H0	1/6W-22K-J
METAL RESISTOR		
R419	467-2G315-H0	2W-15kΩ-JL
R420	467-2G315-H0	2W-15kΩ-JL
R421	467-2G315-H0	2W-15kΩ-JL
CARBON RESISTOR		
R413	467-8E227-H0A	1/2W-2.7KΩ-J
R414	467-8E227-H0A	1/2W-2.7KΩ-J
R415	467-8E227-H0A	1/2W-2.7KΩ-J
INDUCTANCE WITH COLOUR CODES		
L401	471-1068H-00	EL0606SKI-680J
L402	471-2068K-00	SPT0305-680K-5

FRONT AV BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-M2035-290A	FRONT AV PCB
ELECTROLYTIC CAPACITOR		
CV01	464-6D610-M0	CD110-16V-10uF-M
CV02	464-6D610-M0	CD110-16V-10uF-M
CARBON RESISTOR		
RV01	467-1D115-H0	RT14-1/4W-150Ω-J
RV02	467-1D115-H0	RT14-1/4W-150Ω-J

FRONT AV BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-M2035-0500	BUTTON PCB
LIGHT-EMITTING DIODE		
VD602	340-10021-50	2EF565 （GREEN）
VD601	340-10039-20	HFR205 (RED）
IC		
U601	352-69380-00	HRM138BB3000
ELECTROLYTIC CAPACITOR		

SYMBOL	PART NO.	DESCRIPTION
C601	464-6D647-M0	CD110-16V-47uF-M
CARBON RESISTOR		
R603	467-1C033-H0	1/6W-33Ω-J
R601	467-1C133-H0	1/6W-330Ω-J
R903	467-1C133-H0	1/6W-330Ω-J
R602	467-1C156-H0	1/6W-560Ω-J
R904	467-1C156-H0	1/6W-560Ω-J
R901	467-1C122-H0	1/6W-220Ω-J
R902	467-1C122-H0	1/6W-220Ω-J
R905	467-1C182-H0	1/6W-820Ω-J
R906	467-1C222-H0	1/6W-2.2K-J